

PHARMACOLOGICAL INVESTIGATION OF EDEMA AND VASCULAR
PERMEABILITY INDUCED BY *Loxosceles intermedia* VENOM AND
DERMONECROTIC TOXIN

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In this study we characterized the edema and vascular permeability response induced by the venom and dermonecrotic recombinant toxin (LiRecDT1) of *Loxosceles intermedia* (brown spider) in mice. We carried out a preliminary pharmacological investigation of the mechanisms involved in these responses. Intraplantar injection of crude venom or LiRecDT1 induced a marked edema and increase in vascular permeability. These responses were inhibited by previous administration of compound 4880 (a mast cell degranulator) and promethazine (H1 receptor antagonist). This inhibition suggested that histamine action at H1 receptors may be important for edema and vascular permeability induced by crude venom and LiRecDT1. Besides, the inhibition effect after compound 4880 treatment indicated that mast cells may be important as a source of histamine to induce the effects observed. These results may lead to a better understanding of host response to brown spider toxins and also give insights into a more rational pharmacological approach in treatment of intense inflammatory response associated with brown spider envenomation.